

## CLAIMS

1. A method of applying a marker element (6; 6'; 6"; 25; 25'; 26; 28) to an implant (1; 1'; 1"; 1''; 20; 20'), in particular a stent, intended for implantation in the human or animal body, comprising a main body and an opening (3; 3'; 3"; 3''; 21; 21') provided in said main body (2; 2'; 2"; 2''; 22; 22') for receiving the marker element (6; 6'; 6"; 25; 25'; 26; 28), characterised in that to form at least a part of the marker element (6; 6'; 6"; 25; 25'; 26; 28) a hardenable material or material mix is introduced into the opening and hardened therein.

2. A method as set forth in claim 1 characterised in that to form at least a part of the marker element (6; 6'; 6"; 25; 25') a hardenable, flowable or pourable material or material mix is introduced into the opening and is hardened therein.

3. A method as set forth in claim 2 characterised in that the flowable or pourable material or material mix is a sinterable granular material or powder which is hardened in the opening by sintering.

4. A method as set forth in claim 2 or claim 3 characterised in that the flowable or pourable material or material mix is joined and in particular welded to the material of the main body (2; 2'; 2"; 22; 22') during the hardening process.

5. A method as set forth in one of the preceding claims characterised in that the hardening process includes an endothermic step and at least a part of the process energy in the endothermic step is introduced locally in the region of the opening.

6. A method as set forth in claim 5 characterised in that at least a part of the process energy in the endothermic step is introduced by

targeted irradiation in the region of the opening, in particular with laser radiation.

7. A method as set forth in claim 5 or claim 6 characterised in that at least a part of the process energy in the endothermic step is introduced by ultrasound.

8. A method as set forth in one of the preceding claims characterised in that the hardening process includes an endothermic step and at least a part of the process energy in the endothermic step is introduced electrically by producing a flow of current through the flowable or pourable material or material mix arranged in the region of the opening (3; 3'; 3"; 21; 21').

9. A method as set forth in claim 1 characterised in that introduction and hardening of the material or material mix is effected by galvanic deposit.

10. A method as set forth in claim 1 characterised in that a cold-setting material or material mix, in particular amalgam, is used.

11. An implant, in particular a stent, for implantation in the human or animal body comprising a main body (2; 2'; 2"; 2'''; 22; 22'), at least one opening (3; 3'; 3"; 3'''; 21; 21') in said main body (2; 2'; 2"; 2'''; 22; 22') and a marker element (6; 6'; 6"; 25; 25'; 26; 28) arranged in said opening (3; 3"; 3'''; 21; 21'), characterised in that the marker element (6; 6'; 6"; 25; 25'; 26; 28) at least partially comprises a hardenable material or material mix which is introduced into the opening (3; 3"; 3'''; 21; 21') and hardened therein.

12. An implant as set forth in claim 11 characterised in that the marker element (6; 6'; 6"; 25; 25'; 26; 28) at least partially comprises a flowable or pourable material or material mix which is introduced into the opening (3; 3'; 3"; 21; 21') and hardened therein, or a material or material

mix which is introduced into the opening by galvanic deposit and hardened there.

13. An implant as set forth in claim 12 characterised in that the flowable or pourable material or material mix is sinterable and is hardened in the opening (3; 3'; 3"; 21; 21') by sintering.

14. An implant as set forth in one of claims 11 through 13 characterised in that the marker element (6; 6'; 6"; 25; 25') is joined and in particular welded to the material of the main body (2; 2'; 2"; 22; 22') by the hardening process.

15. An implant as set forth in one of claims 11 through 14 characterised in that the opening (3; 3'; 3"; 21; 21') and/or the marker element (6; 6'; 6"; 25; 25') and/or the arrangement thereof with respect to the main body (2; 2'; 2"; 22; 22') are adapted to identify at least one property of the implant.

for 12